



Natural Heritage &
Endangered Species
Program

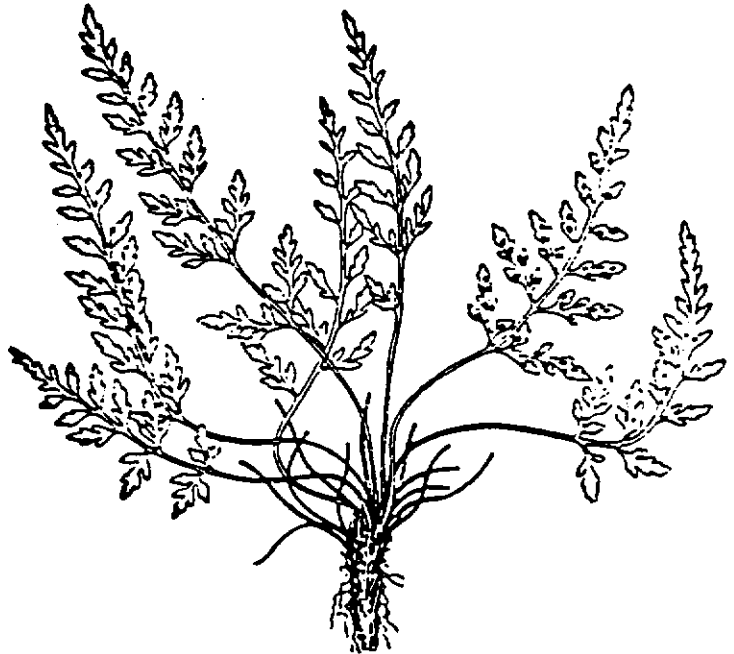
Commonwealth of Massachusetts
Division of Fisheries & Wildlife
Route 135
Westborough, MA 01581
(508) 792-7270 ext. 200

MASSACHUSETTS ENDANGERED PLANTS

MOUNTAIN SPLEENWORT
(*Asplenium montanum* Willd.)

Description

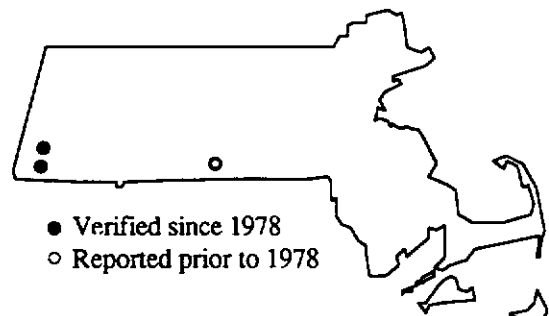
Mountain spleenwort--a member of the Spleenwort family (Aspleniaceae)--is a tiny, delicate, evergreen fern that grows in drooping tufts in dry to moist rock crevices. Its slightly leathery, 5-20 cm (2 - 8 in.) long fronds end in blades (the flattened, expanded portions of leaves) that are mostly deltoid-lanceolate, or broadly triangular, in general outline. The pinnae (first divisions of compound fern fronds) occur in five to twelve pairs and have either no stalks or very short ones. The elongate sori (clusters of spore-producing structures) occur on the lower surface of the fronds and have thin, scale-like coverings called indusia that are attached on one side. The 2-10 cm (3/4 - 4 in.) long stipe (stalk of a fern frond) is brown along the lower two-thirds of its length; the frond's midrib is flattened and green.



Gleason, H.A.. The New Britton and Brown Illustrated Flora of the US & Adjacent Canada. NY Botanical Garden, 1952. Wherry, D. The Fern Guide. Doubleday. New York.



Documented Range of
Mountain Spleenwort



Massachusetts Distribution by Town

Range

The documented range of mountain spleenwort extends from southern Vermont, Massachusetts, and southern New York to Ohio and Kentucky, and south to Georgia and Alabama.

Similar Species

Both wall rue spleenwort (*Asplenium ruta-muraria*) and fragile fern (*Cystopteris fragilis*) superficially resemble mountain spleenwort; however, both occur in different types of habitat. Wall rue spleenwort grows on limestone and calcareous rocks, and fragile fern grows in soil that is near neutral on slope and ledges. In contrast, mountain spleenwort grows only on noncalcareous rock. Unlike mountain spleenwort, wall rue spleenwort does not have a dark stipe. Finally, fragile fern has from eight to eighteen pairs of pinnae, compared to the five to twelve pairs of mountain spleenwort.

Habitat in Massachusetts

Mountain spleenwort is found growing as tufts lodged in crevices and cracks in noncalcareous rock outcrops, often ones protected by small overhangs. This species prefers acidic conditions. It can be found in association with both hemlock and upland oak communities and favors dense to medium shade. Specific habitats in Massachusetts include vertical ledges of stratified rocks and barren, sunny quartzite cliffs, under an overhanging ledge. Historical Massachusetts habitats include a crevice in the bare face of a cliff and the lower shoulder of a mountain. Associated species include hayscented fern (*Dennstaedtia punctilobula*) and Dicranum mosses (*Dicranum* spp.).

Population Status

Mountain spleenwort is presently listed as "Endangered" in Massachusetts. Causes of its rarity in the state include the scarcity of its habitat and the fact that Massachusetts is at the northern edge of its range. There are three current stations (discovered or relocated since 1978) in two towns and three historical stations (unverified since 1978) in two towns. (One town contains both current and historical stations and is represented by a single, solid dot on the town distribution map.) Mountain spleenwort is also considered rare in Vermont, New York, Connecticut, Rhode Island, New Jersey, and Indiana. It was present historically in Missouri and Michigan.